

REMARKS

Petition for Extension of Time Under 37 CFR 1.136(a)

It is hereby requested that the term to respond to the Examiner's Action of June 7, 2006 be extended three months, from September 7, 2006 to December 7, 2006.

Authorization to charge a Credit Card is given to cover the extension fee. The Commissioner is hereby authorized to charge any additional fees associated with this communication to Deposit Account No. 19-5425.

In the Office Action, the Examiner indicated that claims 1 through 24 are pending in the application and the Examiner rejected all claims.

Resubmission of International Preliminary Examination Report

At the bottom of the Office Action Summary, there is a hand-written notation requesting resubmission of the "10 page document filed May 2, 2005." Applicant believes the document being referred to is the International Preliminary Examination Report, dated April 18, 2005. Applicant encloses a copy of this document pursuant to the Examiner's request.

The Objection to the Abstract

On page 2 of the Office Action, the Examiner objected to the Abstract stating that it "does not reflect the inventive feature of the claimed invention to distinguish over the prior art." Applicant has amended the Abstract and believes that the amendment overcomes this objection.

The §112 Rejections

On page 2 of the Office Action, the Examiner rejected claims 1-24 under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant has amended independent claims 1 and 24 to overcome the Examiner's rejection and believes, as discussed below, that these amendments place the independent claims (and all claims depending therefrom) in allowable condition. Applicant has also amended claim 2 for clarity, in accordance with the Examiner's requirement.

Claim Rejections, 35 U.S.C. § 102

On page 3 of the Office Action, the Examiner rejected claims 1, 3, 4, 12, and 24 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,659,785 to Pechanek et al.

The Present Invention

The present invention describes a processor microarchitecture targeted at use in embedded systems where there is significant repetition of the code sequences that are executed by the processor. The microarchitecture is designed to be highly configurable in order to support an automated processor generation method.

A two-tier register file structure is used. There is a main register file with a limited number of access ports. A code generator seeks to minimise the number of register file accesses by passing data values directly between functional units and intermediate holding registers without passing them through the register file. Moreover, reads and writes to the register file are explicitly generated by the

code generator like any other operation. The register file is treated like any other functional unit in the processor and has no special status.

Connectivity in the architecture is generally minimized and focused on the connections that provide the most impact on overall performance. Thus certain functional units may have to communicate data that are not directly connected. To support this certain functional units are able to copy data from their input operands to their outputs. That way data can be transported around the functional units as required using copies through functional units.

The Cited Prior Art Does Not Anticipate the Claimed Invention

The MPEP and case law provide the following definition of anticipation for the purposes of 35 U.S.C. §102:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131 citing *Verdegaal Bros. v. Union Oil Company of California*, 814 F.2d 628, 631, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987)

As noted above, the Examiner rejected claims 1, 3, 4, 12, and 24 under 35 U.S.C. §102 as being anticipated by Pechanek. By this amendment, independent claims 1 and 24 have each been amended to include the limitations of claims 8 and 9, and claims 8 and 9 have been cancelled. Since the independent claims, as amended, recite elements previously examined and which are not found in the prior art, each of the independent claims, and all claims depending therefrom, are in allowable condition. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1-7, and 10-24.

Conclusion

The present invention is not taught or suggested by the prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims. An early Notice of Allowance is earnestly solicited.

Included herein is a Petition for extension of time to respond to the Examiner's Action, and authorization to charge the extension fee to a credit card. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 19-5425.

Respectfully submitted,

December 7, 2006
Date

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